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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/601,406  
Filing Date: June 23, 2003  
Appellant(s): NOVAK, PAVEL

\_\_\_\_\_  
Wesley W. Whitmyer, Jr.  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed November 25, 2008 appealing from the Office action mailed July 25, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

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**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,788,688	BAUER ET AL.	8-1998
6,589,170	FLACH ET AL.	7-2003
6,067,571	IGARASHI ET AL.	5-2000
7,103,646	SUZUKI	9-2006

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 10-12, 18-23, 31-33, 39-44, 52-54, 60-65, 73-75, and 81-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al (US Pat. 5,788,688) hereafter "Bauer," in view of what is well known in the art.

3. As to claim 40, Bauer discloses a system for controlling both primary medical devices, which are part of a surgical network, and ancillary medical devices (Abstract), comprising:
- a surgical network (Fig. 3, label 98);
  - an input device, connected to said surgical network, which inputs a medical command (column 3, lines 3-6, and Fig. 3, label 70, connected to surgical network via label 66);
  - a controller, connected to said surgical network, which receives the medical command and generates corresponding medical command data (Fig. 3, label 66 and column 7, lines 25-29);
  - at least one primary medical device, connected to said surgical network, having a first translator which receives the medical command data via said surgical network and translates the medical command data (Fig. 3, labels 44 and 46 (primary medical devices) and column 7, lines 22-25);
  - at least one ancillary medical device, in communication with the first translator, which receives the translated medical command data and carries out the corresponding medical command (Fig. 3, labels 74 and column 7, lines 19-29, camera receives commands from the ECU (Fig. 3, label 66));
  - a data stream, generated by at least one of said at least one ancillary medical devices, with a higher bandwidth than said surgical network is

capable of transmitting (column 3, lines 20-25, video image signal reads on data stream, and further column 7, line 60-column 8, line 6, disclose how the video images are processed, i.e. they are not carried over the same media and do not utilize the same controller that the commands used since they occupy more bandwidth than the commands);

and a second translator, in communication both with said surgical network and with an ancillary network, which receives and translates said data stream (Fig. 3, label 66, and column 7, line 65-column 8, line 2).

However, Bauer does not explicitly disclose that the at least one ancillary medical device (the endoscopic camera) is in communication with the first translator which receives command data via the surgical network. Rather, command and control information is received from the ECU (Fig. 3, label 66) over the video network and any translating of medical commands is done at the ECU or the camera control unit (Fig. 3, label 49), not on the surgical network.

But, simply transmitting command and control information to Bauer's camera via the surgical network would have been an obvious modification of Bauer. It is well known in the art that remote cameras can receive command and control information over one type of network connection and transmit the video data over a second type, i.e. one of higher bandwidth. Therefore Official Notice (see MPEP 2144.03) is taken that it

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would have been obvious to one of ordinary skill in the art at the time of the invention to send command and control information to Bauer's endoscopic camera over the same connection (the surgical network) that it sends command and control information to surgical equipment in order to have a common interface to distribute commands of all the devices.

4. As to claim 42, Bauer discloses a system for controlling medical devices, comprising:

a surgical network (Fig. 3, label 98);

an input device, connected to said surgical network, which inputs a medical command (column 3, lines 3-6, and Fig. 3, label 70, connected to surgical network via label 66);

a controller, connected to said surgical network, which receives the medical command and generates corresponding medical command data (Fig. 3, label 66 and column 7, lines 25-29);

an ancillary network (column 7, line 60-column 8, line 6, the video network reads on the ancillary network as it is separate from the command and control network of the medical devices in that it uses different transmission media and translators);

a medical device connected to said surgical network (Fig. 3, label 74 and connected to surgical network via label 66), said device having

an interface, by which said medical device is in communication with said ancillary network (Fig. 3, labels 49 and 74); and

a data stream, generated by said medical device and communicated to said ancillary network, with a higher bandwidth than said surgical network is capable of transmitting (column 3, lines 20-25, video image signal reads on data stream, and further column 7, line 60-column 8, line 6, disclose how the video images are processed, i.e. they are not carried over the same media and do not utilize the same controller that the commands used since they occupy more bandwidth than the commands).

However, Bauer does not disclose the medical device (the endoscopic camera) has a first interface by which said medical device is connected to said surgical network and by which said medical device receives the command data via said surgical network.

But, simply transmitting command and control information to Bauer's camera via the surgical network would have been an obvious modification of Bauer. It is well known in the art that remote cameras can receive command and control information over one type of network connection and transmit the video data over a second type, i.e. one of higher bandwidth. Therefore Official Notice (see MPEP 2144.03) is taken that it would have been obvious to one of ordinary skill in the art at the time of the invention to send command and control information to Bauer's endoscopic camera over the same connection (the surgical network) that it



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- sends command and control information to surgical equipment in order to have a common interface to distribute commands of all the devices.
5. As to claims 1, 22, 41, and 43, they are rejected by the same rationale set forth in claim 40's rejection.
  6. As to claims 64 and 82, they are rejected by the same rationale set forth in claim 42's rejection.
  7. As to claims 2, 23, 44, and 65, Bauer discloses said input device is connected to said controller (column 3, lines 3-10).
  8. As to claims 10, 31, 52, and 73, Bauer discloses an ancillary controller connected to said ancillary network (column 7, line 65-column 8, line 2).
  9. As to claims 11, 32, 53, and 74, Bauer discloses said ancillary network includes an ancillary input device (Fig. 3, label 74 and column 7, line 60-column 8, line 6).
  10. As to claims 12, 33, 54, and 75, Bauer discloses said ancillary input device is connected to said ancillary controller (Fig. 3, label 74 and column 7, line 60-column 8, line 6).

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11. As to claims 18, 39, 60, and 81, Bauer discloses said translator includes a lookup table for performing translations (inherent in column 3, lines 6-10).
12. As to claims 19 and 61, Bauer discloses said data stream is video data, the system further comprising a monitor, which is connected to said surgical network, for reproducing said video data as a video image after said video data has been translated by said translator (column 7, line 60-column 8, line 6).
13. As to claims 20 and 62, Bauer discloses the video image is a live video feed (column 7, line 60-column 8, line 6).
14. As to claims 21 and 63, Bauer discloses at least one primary medical device, and the video image is a visual representation of at least one of said primary or ancillary medical devices (column 7, line 60-column 8, line 6).
15. Claims 3-4, 8, 13-14, 17, 24-25, 29, 34-35, 38, 45-46, 50, 55-56, 59, 66-67, 71, 76-77, and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer as applied to claims 1, 22, 43, and 64 above, and further in view of Flach et al (US Pat. 6,589,170), hereafter "Flach."

16. As to claims 3, 24, 45, and 66, Bauer discloses the invention substantially with regard to the parent claims 1, 22, 43, and 64, but is silent on the translator being in communication with at least one of said at least one ancillary medical devices via an Ethernet connection. Rather, Bauer's invention utilizes a similar means of communication, an 8 bit parallel bus, but chooses not to use Ethernet.

However, Flach discloses a similar invention (Abstract) that utilizes Ethernet to communicate between medical devices, translators, and controllers (column 7, lines 13-25)).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bauer and Flach in order to utilize the flexibility and increasing availability of Ethernet based networks.

17. As to claims 4, 25, 46, and 67, Bauer discloses the invention substantially with regard to the parent claims 1, 22, 43, and 64, but is silent on the translator being in communication with at least one of said at least one ancillary medical devices via a wireless connection.

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However, Flach discloses a similar invention (Abstract) that utilizes wireless connections to communicate between ancillary medical devices and their translators and controllers (column 1, lines 14-18).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bauer and Flach in order to utilize the flexibility and increasing availability of wireless based networks.

18. As to claims 8, 29, 50, and 71, they are rejected by the same rationale set forth in claims 3, 24, 45, and 66's rejections.

19. As to claims 13, 34, 55, 76, they are rejected by the same rationale set forth in claims 3, 24, 45, and 66's rejections.

20. As to claims 14, 35, 56, 77, they are rejected by the same rationale set forth in claims 4, 25, 46, and 67's rejections.

21. As to claims 17, 38, 59, and 80, they are rejected by the same rationale set forth in claims 3, 24, 45, and 66's rejections.

22. Claims 5, 15, 26, 36, 47, 57, 68, and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer and Flach as applied to

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claims 4, 14, 25, 35, 46, 56, 67, and 77 above, and further in view of what was well known in the art.

23. As to claims 5, 26, 47, and 68, Bauer and Flach disclose the invention substantially with regard to the parent claims 4, 25, 46, and 67, and further disclose wireless capability (Flach, column 1, lines 14-18).

Although Bauer and Flach do not explicitly suggest the use of Bluetooth, Official Notice is taken (MPEP 2144.03) that Bluetooth technology and was a well-known wireless standard at the time of the applicant's invention was made, which is deployed to enhance wireless communication and user convenience. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to take advantage of a known standard to modify the teachings of Bauer and Flach in order to achieve such benefits.

24. As to claims 15, 36, 57, 78, they are rejected by the same rationale set forth in claims 5, 26, 47, and 68's rejections.

25. Claims 6-7, 16, 27-28, 37, 48-49, 58, 69-70, and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer as applied to claims 1, 22, 43, and 64 above, and further in view of Suzuki (US Pat. 7,103,646).

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26. As to claims 6, 27, 48, and 69, Bauer discloses the invention substantially with regard to the parent claims 1, 22, 43, and 64, but is silent on said surgical network includes a self-configuring bus. Rather, the Bauer does not get into the specifics of how the bus handles the configuration of devices.

However, Suzuki discloses a device-controlling network that includes a self-configuring bus (column 1, lines 4-9 and column 2, lines 34-43).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bauer and Suzuki in order to give greater ease of use for the devices that are attached to Bauer's invention and will therefore decrease the responsibilities of the user.

27. As to claims 7, 28, 49, and 70, Suzuki and Bauer disclose the invention substantially with regard to the parent claims 6, 27, 48, and 69, and further disclose said bus is a CAN bus (column 1, lines 4-9).

28. As to claims 16, 37, 58, and 79, they are rejected by the same rationale set forth in claims 6, 27, 48, and 69's rejections.

**(10) Response to Argument**

The examiner summarizes the various points raised by the appellant and addresses replies individually.

(1) The appellant argues, with respect to 35 U.S.C. 103(a) rejections of the independent claims 1, 22, 40, 41, 42, 43, 64, and 82, that Bauer (US Pat. 5,788,688) does not anticipate the claims. Specifically contending, in the claimed invention, at least one medical device is in communication, at least indirectly, with both networks (surgical and ancillary networks) and that medical command data for controlling the medical device be communicated over the surgical network with a data stream, or feedback data, generated by the medical device be communicated over the ancillary network and Bauer does not suggest or disclose such. The appellant makes specific references to the Bauer teaching, in regards to possible interpretations of the Bauer's devices in view of the claimed invention, see page 13-14 of the Appeal Brief.

**In reply to argument (1)**, the Examiner notes one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). That is, the rejection was based on Bauer in view of what was

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well known in the art, and therefore it is not the Examiner's contention that Bauer alone anticipates the claims.

Further, in regards to the appellant's specific arguments against the Bauer teaching, the Examiner will reiterate, for clarities sake, the interpretation of Bauer against the claimed invention. Claim 40 will be used as an illustrative example for the other independent claims:

Bauer discloses a system for controlling both primary medical devices, which are part of a surgical network, and ancillary medical devices (Abstract), comprising:

- a surgical network (Fig. 3, label 98);

- an input device, connected to said surgical network, which inputs a medical command (column 3, lines 3-6, and Fig. 3, label 70, connected to surgical network via label 66);

- a controller, connected to said surgical network, which receives the medical command and generates corresponding medical command data (Fig. 3, label 66 and column 7, lines 25-29; commands are received via the control panel (label 70) and sent of to medical devices (labels 44 and 46));

- at least one primary medical device, connected to said surgical network (Fig. 3, labels 44 and 46 (primary medical devices) and column 7, lines 22-25), having a first translator which receives the medical command data via said surgical network and translates the medical command data



(Fig. 3, labels 100 and 102; commands are received via IEEE-488 or RS-485 interfaces and translated for use by the surgical equipment);

at least one ancillary medical device which receives translated medical command data and carries out the corresponding medical command (Fig. 3, labels 74 and column 7, lines 19-29, camera receives commands from the ECU (Fig. 3, label 66));

a data stream, generated by at least one of said at least one ancillary medical devices, with a higher bandwidth than said surgical network is capable of transmitting (column 3, lines 20-25, video image signal reads on data stream, and further column 7, line 60-column 8, line 6, disclose how the video images are processed, i.e. they are not carried over the same media and do not utilize the same controller as the commands since they require more bandwidth than the commands);

and a second translator, in communication both with said surgical network and with an ancillary network, which receives and translates said data stream (Fig. 3, label 66, and column 7, line 65-column 8, line 2, the ECU (label 66) communicates with both the video network (i.e. labels 49, 74, and 90) and surgical network).

As stated in the Grounds of Rejection and the previous Final Office Action, Bauer does not explicitly disclose that the at least one ancillary medical device (the endoscopic camera) is in communication with the first translator which receives command data via the surgical network. Rather, command and control

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information is received from the ECU (Fig. 3, label 66) over the video network and any translating of medical commands for the camera is done at the ECU or the camera control unit (Fig. 3, label 49), not on the surgical network.

Note the above mapping of the claims, corrects an error in the mapping under the Grounds of Rejection, in that it previously recited “at least one ancillary medical device, ***in communication with the first translator***, which receives the translated medical command data and carries out the corresponding medical command” (emphasis added). Obviously the emphasized statement should have been elided as immediately subsequent to that the Examiner stated, “Bauer does not explicitly disclose ***the at least one ancillary medical device (the endoscopic camera) is in communication with the first translator which receives command data via the surgical network***” and an additional fact was relied upon establish the conclusion of obviousness.

(2) The appellant argues, with respect to 35 U.S.C. 103(a) rejections of the independent claims 1, 22, 40, 41, 42, 43, 64, and 82, that Bauer in view of what is well known in the art does not render the claims obvious. Specifically contending the Examiner’s use of Official Notice is “unquestionably improper” as the Examiner has relied upon Official Notice to come to the conclusion of obviousness, and has not be used, as is proper, to take notice of fact.

**In reply to argument (2)**, the examiner notes that conclusion of obviousness is based on the modification of Bauer in view of what was well

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known in the art. That is, the combination of the two teachings and therefore the conclusion of obviousness are based in **35 USC 103(a)** which states (emphasis added):

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

As the applicant acknowledges, the Office may take official notice of a fact. This is precisely what the examiner did previously. The fact relied upon by the examiner, as stated in of the previous actions was that remote cameras can receive command and control information over one type network connection and transmit video data over a second type, and that fact is common knowledge in the art now and was at the time of the invention. Perhaps the appellant takes issue with the manner in which the Examiner has worded the rejection and as such has caused confusion with interpretation of the rejection. For clarities sake, the Examiner provides an alternate wording (the reference to Official Notice has simply moved forward one sentence; the rewording of the rejection does not substantively change the rejection, as it is clear the appellant was aware of what fact was relied upon in the use of Official Notice, see subsequent argument label 3) of the rejection: Official Notice is taken (see MPEP 2144.03), it was well known in the art that remote cameras can receive command and control information over one type of network connection and transmit the video data over a second type, i.e. one of higher bandwidth. Therefore it would have been

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obvious to one of ordinary skill in the art at the time of the invention to send command and control information to Bauer's endoscopic camera over the same connection (the surgical network) that it sends command and control information to surgical equipment in order to have a common interface to distribute commands of all the devices.

(3) The appellant argues, with respect to 35 U.S.C. 103(a) rejections of the independent claims 1, 22, 40, 41, 42, 43, 64, and 82, that Bauer in view of what is well known in the art, does not render the claims obvious. Specifically contending the Examiner's use of Official Notice is improper, as it was not common knowledge or well-known in the art during the 2002/2003 time frame for surgical devices, such as cameras, to be provided command and control information over one type of network and transmit a data stream, such as video data stream, over a second type of network. Further alleging cameras were connected to only one type of network, and all communication to/from these devices took place via that one type of network.

**In reply to argument (3)**, and notes the appellant has not adequately traversed the examiner's use of Official Notice. As MPEP 2144.03(c) states, "To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art," (emphasis added). The appellant has not stated "why the noticed fact is not

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considered to be common knowledge or well-known in the art.” Rather, the appellant has simply stated it was not well known, without underpinning rationale.

Nonetheless, the **Examiner provides Igarashi et al. (US Pat. 6,607,571; filed 7/1997, and published 5/2000) as evidence** that cameras were known to be provided command and control information over one type of network and transmit a data stream, such as video data stream, over a second type of network (see Fig. 1 and column 3, lines 4-17; camera (label 1003) is controlled by camera controller (label 1017) via a RS232C interface (i.e. a first network, see arrow from label 1017 to label 1003) and video information (a data stream) is obtained via a separate and distinct dedicated cable (see arrow from label 1003 to label 1018) which is specially provided).

(4) The appellant argues, with respect to 35 U.S.C. 103(a) rejections of the independent claims 1, 22, 40, 41, 42, 43, 64, and 82, that Bauer in view of what is well known in the art do not render the claims obvious. Specifically contending the Examiner has relied solely on ‘common knowledge’ in the art without evidentiary support in the record, as the principal evidence upon which the rejection was based.

**In reply to argument (4)**, the Examiner notes the rejection clearly states “Claims 1-2, 10-12, 18-23, 31-33, 39-44, 52-54, 60-65, 73-75, and 81-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bauer et al** (US Pat. 5,788,688) hereafter “Bauer,” in view of what is well known in the art.” Clearly,

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the Examiner has not "rel[ied] **solely** on 'common knowledge in the art without evidentiary support in the record, as **principal evidence** upon which a rejection was based," as is precluded by the MPEP. Rather, Bauer was relied upon as the principal evidence upon which the rejections were based and the well known fact relied upon was that remote cameras can receive command and control information over one type network connection and transmit video data over a second type. See above in regards to Igarashi providing support for the well known fact.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Thomas J. Dailey

/T. J. D./

Examiner, Art Unit 2452

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